

High resolution, large area, high energy x-ray tomography

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oral presentation

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We are developing a large aperture x-ray tomography system for producing high resolution (<100 micron), 3D images of metal objects whose size is tens of centimeters. This system uses a 9 MeV linear accelerator based x-ray source, a scintillator converter, and an optically coupled CCD detector. Results from simulations, resolution tests, and imaging with test objects will be presented. We will also present results from efforts aimed at optimizing imaging strategies and processing using a priori information.

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